Bob Carmany, Pres. (855-1538) Emmett Hughes, Vice Pres. (584-5108)
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The Guilford 99'er Users' Group Newsletter is free to dues paying members (One copy per family. please). Dues are $12.00 per family, per year. Send check to:LF Jones, 3202 Canterbury Dr., Greensboro, NC 27408. The Software Library is for dues paying members only. (George von Seth, Ed.: 292-2035)

OUR NEXT MEETING

DATE: June 5, 1990 Time: 7:30 PM. Place: Glenwood Recreation Center, 2010 S. Chapman Street.

Program for this meeting will be a demonstration of how to customize your own programs. By changing disk drive accesses and other things, you can make a program conform to your system and get the most out of the programs you have. See you there!

MINUTES

The May meeting of the Guilford 99er Users' Group was held on the 1st at the Glenwood Recreation Center on Chapman Street in Greensboro, N.C. Due to the severe thunderstorm that occured before the meeting, President Bob Carmany delayed the start of the meeting until 7:55 P.M. but only 6 members braved the storm. The minutes were accepted as given in the newsletter and only the treasures' report was given orally.

OLD BUSINESS: There was no old business discussed.

NEW BUSINESS:

President Carmany informed members that Lutz Winkler of San Diego has had a six bypass operation and is back with us in the TI world. Our prayers and good wishes for a speedy recovery are with Lutz.

Members present agreed to wait until the June meeting to conduct the auction for the two keyboards and book that Herman also donated that is by Millers Graphics and is titled EXPLORER. The voluan also includes a disk and Herman says that it contains anything you would ever want to know about the TI. Tony Kleen contributed 3 manuals for the TI to the group and they are at the Center whenever anyone wants to borrow one for a month.

The program was conducted by Tony Kleen and was to be about his RAVE ramdisk which decided it did not want to be demoed and gave up the ghost just before Tony was to demo it! However, with much testing by Bob, Tony, and Bill, it was decided that only the memory had been lost and hopefully no component damage had occured. I have not heard of any ill effects from Tony so it is assumed that this was true. Tony passed out sheets to members showing his progress in his TI/BASE program called side-by-side. Thanks to Tony for a very good demo.

After the program, Bill Woodruff added some software to the club library and the meeting was adjourned at 9:15 P.M.

Respectfully submitted,
L.F. "Mac" Jones, Sec./Treas.
Guilford 99er Users' Group

RAMBLING BYTES

by "Mac"

In spite of a vicious storm that swept eastward across Greensboro and surrounding towns, a few brave souls and my thanks

to them for their efforts. As for me, I sat in the parking lot for about 15 minutes waiting for a lull so I could dash inside. While I sat there, hail about the size of small marbles was bouncing off my car. I was thinking of the reports about base ball size hail that some counties were reporting and I wonder how the cars survived that.

I haven't heard from Tony since the meeting when he "trashed" his RAVE ram disk but I hope it was nothing serious. As I have never owned a ramdisk of any nature, there was very little that I knew about it but some of the members who do have them seemed to think that it was just a loss of the memory in the card and nothing very serious. Tony didn't bring the loading instructions with him as the capacitor that holds the memory is supposed to hold it for a week and he didn't think he would need them. Anyhow, we still got a good demo of Tony's side-by-side program he is writing in TIBase.

There were no offers from the members that were there for the program at the June meeting but I talked with Bob recently and he thinks maybe he can come up with something interesting. I keep thinking Bob will talk more like Crocodile Dundee but apparently he just wasn't in Oz long enough! Ha!

I noticed an ad in MICROpendium from Baker Software that is offering Super Mario Brothers for only $9.50! Where were they about 2 years ago?!! I used to pay that much a month to keep my grandson happy at the Putt Putt arcade. I tried everywhere to find that game for the TI but to no avail. Then Santa brought him a NineTendo so that was solved. Now, lo and behold, here it is! For those of you who are still having to pay a quarter to play this interesting game at the arcade...sounds like a good deal to me.

Those yard sale TI's are still out there. A friend brought one by just the other day that he had picked up at a sale Sunday. He has no knowledge what so ever about just what a TI99 is but he knew I had one and was in the group so he brought it over to see if he could use it at all. It had a HUNT THE WAMPUS cart in the port and a speech plugged into the I/O port. There also was a wierd looking tape player included but it had a tag on the cord that proclaimed it was for a Commadore. Of course the plug was a lot different from the TI. I was glad to check it out for him and we found the console to work fine and also the speech worked with my EXBasic cart plugged in. Of course his unit was sans the modulator and I explained to him the need for one if he ever uses it with a tv. I also explained to him he would have to have either a TEII or EXBasic cart if he wanted to use the speech. Another thing he must have is a TI cable for his tape recorder to work. I could not stress on him the power he actually had in that little black and silver console. He will just have to find out, as I did, just how powerful it really is. You find out when a beginner starts asking you questions about the TI just how much you really have picked up over the years and really didn't know you were so smart!!

One good thing about retirement is that you can be there for someone that does need advise on the TI and even minor repairs. Things that I use to have to sit aside until I had more time to do are now done at the time they need doing. One of the things I like to do is when I pick up another console is to remove the power board and install the power switch on the side of the console along with a re-start pushbutton. This removes all of the heat from under the grom port and puts the power board away from the console somewhere out of sight in the back of the workspace. The only heat you get is just a little from the cart that is plugged in which is not very much at all. The next thing I do is replace the resistor in the video section that gives me better resolution on the characters on the screen. I generally use 330 ohms which seems to be about the value needed to take the shading from around the letters.

By the time you get this newsletter Mother's day will have come and gone. I hope you sent your mom a nice card if you are one of the fortunate ones who still can enjoy her company. We seem to forget as we age just how much they really have given up for us to have the special things we thought we wanted!

Until the June 5th meeting, take real good care of yourself and enjoy the good TImes.

CUSTOM PROGRAMMING

By Bob Carmany

One of the most annoying problems with some of the "off-the shelf" programs is that they don't necessarily fit your system. It is really something that is easy to fix (in most cases) and it will give you a bit of a chance to do some "program engineering" on your own.

Since I'm incurably lazy when it comes to customizing a program, I try to let the computer do most of the work. After all, that's what it is there for --to make things as easy as possible! Let's start with XB programs.

I) Extended BASIC program alterations

A short XB program doesn't present much of a challenge. The easiest way to go about changing a disk access, for example, is to simply go through the program line-by-line and change the necessary code. In a program of 100 lines of code or less, changing DSK1 to DSK4 doesn't take much time.

Long XB programs present a bit more difficult problem. Simply going through several hundred lines of code can be a

tiresome process. Why not let the computer do most of the work. A while back, I wrote a bit about programming with a word processor. One of the TI-Writer clones (F'WEB, for instance) will do very nicely. Besides the word processing program, you will need XLATE or a similar program to turn the text file back into a runnable program -- but I'm getting ahead of myself!

The first thing to do is to load the program into memory. Then, to take advantage of the power and simplicity of F'WEB, we need to turn the program into a D/V 80 file. Another easy task! All you have to do is LIST the program to disk. Simply type LIST "DSKx.FILENAME" where "x" is the drive number followed by whatever name you choose to give the output file. Now, you are ready to start!

Use (R)eplace(S)tring to find and replace the disk access or other bit of code to the specifications of your system. You can easily type /DSK1/DSK4/ for example to find and replace that disk access. The editor will ask you if you wish to replace each of the occurences as it finds them throughout the program/text file. When you have made all of the changes, the text file must be returned to a runnable program.

A program like XLATE will do the job very nicely. It is a simple matter to follow the screen prompts with the result being a program with all of your changes neatly made. The end result is that you have avoided the hassle of going through a long program line-by-line to change a few bits of code and the computer did most of the work.

II) A/L Program Alterations

Assembly Language code requires a bit more effort but the results are much the same. In fact, in a pinch, you can use the first part of this technique for XB programs as well. You will need a disk sector editor. John Birdwell's DISK UTILITIES package is excellent because it has a "String Search" option that operates in both Hex and ASCII modes. Again, we are going to assume you are changing DSK1 to DSK4.

Go to "File Utilities" and then "String Search". Follow the screen prompts for filename and disk drive number. Enter "A" for ASCII mode and type in DSK1 at the first prompt and DSK4 at the second. The program will find the occurrences of DSK1 and give you the option of changing each of them or all of them. Just press CNTL-W when you are through with the sector and enter at each of the sector, and byte promps and the code will be written to disk. Again nice and easy ---maybe!

One of the drawbacks to using a disk sector editor is that they are VERY unforgiving! An error in choosing the proper changes can render the program inoperative. If you have never used a disk sector editor, get someone more experienced to make the alterations for you until you feel comfortable about using it yourself.

A new way to make changes to A/L code has recently appeared by way of RAG Software (AKA Roy A Green). In his recently marketed MULTIPLAN update, he included a program called RAGPATCH. It uses a couple of source code files and writes the changes directly to the target A/L file. The source code is fully commented and all you have to do is change the drive accesses and program colors (in the case of MULTIPLAN) to ones that will suit your system. The whole process takes about five minutes and that includes reading the docs and source code to know what you are doing. In fact, there are several bits of source code for changing programs other than his MULTIPLAN updates included in the package. The source code is program-specific and the only drawback is that someone will have to write the specific source code to suit the program you wish to alter before you can effect the changes using RAGPATCH. THE RAGPATCH program is a "universal" program, though, and can load the changes into any A/L program given the right source code file.

In short, there are several ways to alter a program to suit your own needs and it need not be a difficult process. Especially if you let your computer do most of the work. Stop by the meeting for a demo of several ways to customize your programs.

CALL LOADS

CALL LOAD(-24578,0) For storage of D/F files in EXPMEM2 with MiniMem
CALL LOAD(-24578,8) For storage of I/F files in EXPMEM2 with MiniMem
CALL LOAD(-24578,16) For storage of D/V files in EXPMEM2 with MiniMem
CALL LOAD(-24578,24) For storage of I/V files in EXPMEM2 with MiniMem
CALL LOAD(-27648,x,x,x,x) Speech chip locations
CALL LOAD(-30945,0) Creates a white edge character
CALL LOAD(-31572,x) Varies keyboard response
CALL LOAD(-31730,33) Quits Extended BASIC to Master Title Screen
CALL LOAD(-31740,x,x,x,x) Loads Sound chip. Sound continues until a CALL SOUND, INPUT or ERROR.
CALL LOAD(-31744,x) Continues last sound. 0= Loud 15= Quiet
CALL LOAD(-31745,0) Freezes screen and blanks screen (restore with FCTN-).
CALL LOAD(-31748,x) Set cursor blink rate (value 0 to 255). 1 is normal.
CALL LOAD(-31788,160) Blank screen on next keypress.
CALL LOAD(-31788,192) Disable sprite motion and automatic sound.

CALL LOAD(-31788,224) Normal operation.
CALL LOAD(-31788,225) Magnified sprites.
CALL LOAD(-31788,226) Double sized sprites.
CALL LOAD(-31788,227) Magnified, double sized sprites.
CALL LOAD(-31788,232) Multi-color mode (48 X 64 squares).
CALL LOAD(-31794,x) Timer for CALL SOUND (x= 0 to 255).
CALL LOAD(-31804,x) Set cursor blink rate (0 to 255).
CALL LOAD(-31804,0,36) Quit Extended BASIC to Master Title Screen.
CALL LOAD(-31806,-32) Continue sound.
CALL LOAD(-31806,0) Enable sprite motion, Quit key, and sound chip.
CALL LOAD(-31806,16) Disable Quit key.
CALL LOAD(-31806,30) Stop sprite motion and disable Quit key.
CALL LOAD(-31806,32) Disable sound chip.
CALL LOAD(-31806,48) Disable sound chip and Quit key.
CALL LOAD(-31806,64) Stop sprite motion.
CALL LOAD(-31806,96) Stop sprite motion and disable sound chip.
CALL LOAD(-31806,128) Disable sound chip,Quit key, and sprite motion.
CALL LOAD(-31808,x,y) Double random number generator (requires RANDOMIZE).
CALL LOAD(-31860,4) Go from Extended BASIC to console BASIC after NEW and cannot use Memory Expansion.
CALL LOAD(-31860,8) Automatic RUN "DSK1.LOAD" and restart of Extended BASIC.
CALL LOAD(-31866,x) Does not allow the full access of 32K (x=1 to 159).
CALL LOAD(-31868,0) No RUN or LIST after FCTN-4.
CALL LOAD(-31868,0,0):: Memory Expansion off.
RUN "DSKx.xxx"
CALL LOAD(-31868,255,231):: Memory Expansion on.
RUN "DSKx.xxx"
CALL LOAD(-31873,x) Start printing at column x (x= 3 to 30).
CALL LOAD(-31877,x) 32= sprite coincidence, 64= 5 sprites on a row.
CALL LOAD(-31878,x) Turn off sprites (x=# of sprite, if x= 0 then turn off all sprites.
CALL LOAD(-31879,x) VDP timer (x= 0 to 255).
CALL LOAD(-31880,x) Single random number generator (x= 0 to 99). Requires RANDOMIZE.
CALL LOAD(-31884,x) Change keyboard mode (x = 0 to 5).
CALL LOAD(-31885,255) Execute BYE.
CALL LOAD(-31888,63,255) Turn disk drives off. Use NEW to free memory.
CALL LOAD(-31888,55,215) Turn disk drives on. Use NEW for buffers.
CALL LOAD(-31931,0) Unprotect Extended BASIC program.
CALL LOAD(-31931,2) Set command ON WARNING NEXT.
CALL LOAD(-31931,4) Set command ON WARNING STOP.
CALL LOAD(-31931,16) Set command TRACE.
CALL LOAD(-31931,64) Set command ON BREAK NEXT.
CALL LOAD(-31931,128) Protect Extended BASIC program.
CALL LOAD(-31952,x) If x=55 then Memory Expansion is off else it is on.
CALL LOAD(-31952,x,x,x,x) Line number table in Memory Expansion.
CALL LOAD(-31961,51) Quit Extended BASIC to Master Title Screen.
CALL LOAD(-31961,149) Automatic RUN "DSK1.LOAD".
CALL LOAD(-31962,0,32) Execute power up routine--does not close files.
CALL LOAD(-31962,33,111) Go directly to TI BASIC.
CALL LOAD(-31962,99,114) Automatic RUN "DSK1.LOAD" and restart of Extended BASIC.
CALL LOAD(-31962,101,190) Execute LIST from command mode only.
CALL LOAD(-31962,100,155) Execute RUN.
CALL LOAD(-31962,100,124) Execute NEW.
CALL LOAD(-31962,100,126) Execute CONTINUE command--from command mode only.
CALL LOAD(-31962,100,128) Another LIST command from the command mode.
CALL LOAD(-31962,100,130) Execute BYE--closes all files.
CALL LOAD(-31962,100,132) Execute default NUM command when running program ends.
CALL LOAD(-31962,100,136) Execute default RESEQUENCE command.
CALL LOAD(-31962,160,000) Generates a colorful Title Screen.
CALL LOAD(-31962,160,04) Executes RUN without prescan.

CALL LOAD(-31962,255) Automatic RUN "DSK1.LOAD" and restart of Extended BASIC. Command mode only.
CALL LOAD(-32112,8) Searches disk ???
CALL LOAD(-32114,2) Random garbage.
CALL LOAD(-32114,13) Screen goes wild.
CALL LOAD(-32116,2) Random characters on the screen.
CALL LOAD(-32116,4) Go from Extended BASIC to console BASIC after NEW. Cannot use Memory Expansion.
CALL LOAD(-32187,9) 0 Line number.
CALL LOAD(-32188,1) Change color, generate syntax error.
CALL LOAD(-32188,127) Change color, generate breakpoint.
CALL LOAD(-32572,1) Produce distorted keyboard response.
CALL LOAD(-32572,128) Disable keyboard.
CALL LOAD(-32630,0) Master Title Screen without graphics.
CALL LOAD(-32699,14) Stop TRACE.
CALL LOAD(-32699,16) Start TRACE.
CALL LOAD(-32699,128) Protect Extended BASIC program.
CALL LOAD(-32730,32) Quit Extended BASIC to Master Title Screen.

CALL PEEK(PRES)

Another summer is upon us and, as usual, computing time diminishes proportionately with the rising temperature. Of course, there is always the temptation to sit in the air-conditioned comfort of the den and fiddle around with the TI for awhile. Diminished computer time also means diminished input for the newsletter. Please help George out and take a few minutes to write an article for YOUR newsletter.

There is still a trickle of new stuff for the TI around. For example TIVIEW (on the BBS) is a neat little program that allows one to look at pictures created for the Amiga. What next? There are currently programs to view just about any pictures available from the IBM to Amiga. It amazes me that our orphan can do all of these "impossible" things!

In my poking about with QUEST, I uncovered what Ron Kleinschafer called a "bloody great grasshopper" of a program bug. With his usual aplomb, Ron whipped together a fix in record time. In all, it is the second revision of the DSR program that I have gotten from Ron since I got back from Oz in March. As impressed as I am with the card itself, I'm more impressed with the responsiveness Ron shows to users of the QUEST card.

Speaking of QUEST, I have found that the RAMdisk "disease" is just short of being fatal. George and I hope to have a couple of boards to work on in the near future. All of that lightning storage space is awsome. I even contemplated pawning the wife's jewelry to get another one but she "talked" me out of it!

Rumor has it that Tony McGovern is also coming out with a revision of F'WEB ---Vn 4.3. I understand that most of the changes will be in the 80-column version but Tony has never been one to neglect the 40-column version as well. If memory serves me, it was about two years ago that he released the "definitive" version of F'WEB. It's programmers like Tony that keep the TI alive and well by pushing the machine to its ultimate limits.

How many years has it been since TI pulled the plug on us? The doomsday "prophets" gave the TI 3 months after Texas Instruments cut the 99/4A adrift. There are still several hundred Users' Groups alive and well and ours is one of the oldest!!

FOR SALE

1 - 32K PEB card. Ugly but works just fine --$30 takes it! Contact Bob Carmany at the meeting or leave a message on ROS. Will consider a trade for an RS232 card or other TI gear as well.

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*-----------------------------------------*
|                                         |
|  FUNNELWEB FARM SCREEN IMAGE LIST PRINTER |
|                                         |
*-----------------------------------------*
|                                         |
|   PROGRAM   : CHICKEN HAWK              |
|                                         |
|   AUTHOR    : Ray Speer                 |
|                                         |
*-----------------------------------------*
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100 GOSUB 1690
110 NC=10
120 CALL CHAR(128,"000000010
38FFF0F0102040A000000003E7CF
8F0E0C0FFE00000000000000000"
)
130 CALL COLOR(0,16,1)
140 CALL CHAR(96,"0000000004
0205"&RPT$("0",18)&"20303020
707078FC7E7F6F2723212020")
150 CALL CHAR(88,"0103070F19
397FFF"):: CALL CHAR(89,"7F7
F7F6766667E7E"):: CALL CHAR(
90,"80C0E0F0989CFEFF")
160 CALL CHAR(91,"FEFEFEE666
667E7E")
170 CALL CHAR(100,RPT$("0",1
9)&"7FF03070F1F3E00000000005
0204080F0FFF6C0800000")
180 CALL CHAR(104,"00020301"
&RPT$("0",25)&"7071F87CF6772
3F1F1F0F0707070707")
190 CALL SCREEN(14)
200 CALL COLOR(13,5,5)
210 CALL HCHAR(2,1,128,736)
220 CALL CHAR(108,RPT$("0",1
6)&"1F01"&RPT$("0",13)&"7071
F070F070207FFFF3F0707070707"
)
230 CALL HCHAR(19,8,88):: CA
LL HCHAR(20,8,89):: CALL HCH
AR(19,9,90):: CALL HCHAR(20,
9,91)
240 CALL CHAR(136,"040404C4E
4F6FE7E3F1E0E0E040C0C04"&RPT
$("0",18)&"A0402000000000")
250 CALL CHAR(112,"1C7EFF000
0010000030387D7FFFFF000000008
01C3EFF000000E0F0F8FCFE0000"
)
260 CALL CHAR(40,RPT$("0",10
)&"1"&RPT$("0",53))
270 CALL CHAR(116,RPT$("0",3
5)&"70707060606060606060606061
E0000")
280 CALL COLOR(14,13,13)
290 CALL HCHAR(21,1,140,128)
300 CALL MAGNIFY(3)
310 CALL CHAR(132,"000000000
06FFF0F0102040A"&RPT$("0",18
)&"C0FFC0E0F0783C1E000000")
320 CALL CHAR(140,RPT$("0",1
7)&"C1D0703010001"&RPT$("0",
20)&"C0F0E0C0808000")
330 CALL CHAR(124,RPT$("0",1
9)&"30F07030101"&RPT$("0",18
)&"30B8E0C080008000")
340 CALL CHAR(120,"000001036
FFF0F0102040A0F3F7702077CF8F
0E0C0FFE000000000C08")
350 CALL SPRITE(#13,112,16,9
6,256,0,-5)
360 BIRD=10
370 IF LEVEL>=2 THEN 380 ELS
E LEVEL=1
380 IF LEVEL>3 THEN LEVEL=1
390 IF LEVEL=1 THEN SC=10 EL
SE IF LEVEL=2 THEN SC=20 ELS
E IF LEVEL=3 THEN SC=55
400 C=140
410 FOR CHI=4 TO NC
420 RANDOMIZE
430 Y=INT((RND$4)+19)$8
440 X=INT((RND$20)+10)$8
450 CALL SPRITE(#CHI,C,16,Y,
X)
460 IF C=140 THEN C=124 ELSE
 C=140
470 NEXT CHI
480 BY=128
490 BS=-20
500 YS=-20
510 CALL POSITION(#4,CHY,CHI
X)
520 IF CHIX=0 THEN 1200
530 CALL SPRITE(#2,104,11,13
2,240,#3,116,2,148,240)
540 RANDOMIZE
550 FS=INT(RND$5)+5
560 HH=INT(RND$20)+22
570 CALL SPRITE(#1,128,2,HH,
256,0,-FS)
580 DISPLAY AT(1,1):"HAWK=";
BIRD
590 DISPLAY AT(1,18):"SCORE=
";SCORE
600 IF A=128 THEN A=132 ELSE
 A=128
610 B=B+1
620 CALL JOYST(1,FX,FY)
630 IF FY=-4 THEN CALL PATTE
RN(#2,108):: GOSUB 1330
640 IF FY=4 THEN CALL PATTER
N(#2,104):: GOSUB 1350
650 CALL KEY(1,K,S):: IF LEV
EL>=2 THEN 660 :: IF K=18 TH
EN GOSUB 1030
660 IF K=0 THEN CALL PATTERN
(#2,108):: GOSUB 1330
670 IF K=5 THEN CALL PATTERN
(#2,104):: GOSUB 1350
680 IF B=8 THEN CALL DELSPRI
TE(#12):: B=0
690 CALL COINC(#1,#12,10,HIT
):: IF HIT THEN 1060
700 CALL PATTERN(#1,A)
710 CALL COINC(#1,HH,CHIX,3,
HAWK):: IF HAWK THEN 720 ELS
E 780
720 CALL PATTERN(#1,136):: C
ALL MOTION(#1,18,0)
730 CALL JOYST(1,FX,FY)
740 IF FY=-4 THEN CALL PATTE
RN(#2,108):: GOSUB 1330
750 IF FY=4 THEN CALL PATTER
N(#2,104):: GOSUB 1350
760 CALL KEY(1,K,S):: IF LEV
EL>2 THEN 790 :: IF K=18 THE
N GOSUB 1030
770 GOTO 790
780 GOTO 600
790 CALL COINC(#1,#4,15,CHIC
):: IF CHIC THEN SCORE=SCORE
-15 :: GOTO 860
800 CALL KEY(1,K,S):: IF LEV
EL>2 THEN 840 :: IF K=18 THE
N GOSUB 1030
810 IF K=0 THEN CALL PATTERN
(#2,108):: GOSUB 1330
820 IF K=5 THEN CALL PATTERN
(#2,104):: GOSUB 1350
830 IF B=8 THEN CALL DELSPRI
TE(#12):: B=0
840 CALL COINC(#1,#12,10,HIT
):: IF HIT THEN 1060 ELSE CA
LL COINC(#1,#12,10,HIT):: IF
 HIT THEN 1060
850 GOTO 790
860 CALL PATTERN(#1,128):: C
ALL MOTION(#1,-4,-4,#4,-4,-4
)
870 CALL JOYST(1,FX,FY)
880 B=B+1
890 IF FY=-4 THEN CALL PATTE
RN(#2,108):: GOSUB 1330
900 IF FY=4 THEN CALL PATTER
N(#2,104):: GOSUB 1350
910 CALL KEY(1,K,S):: IF K=1
8 THEN GOSUB 1040
920 IF K=0 THEN CALL PATTERN
(#2,108):: GOSUB 1330
930 IF K=5 THEN CALL PATTERN
(#2,104):: GOSUB 1350
940 IF B=8 THEN CALL DELSPRI
TE(#12):: B=0
950 CALL COINC(#1,#12,12,HIT
):: IF HIT THEN 1060
960 CALL PATTERN(#1,132)
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```
970 CALL POSITION(#1,HAWY,HA
WX):: IF HAWX<15 THEN 990
980 IF HAWY<15 THEN 990 ELSE
 860
990 FOR SP=4 TO 12
1000 CALL DELSPRITE(#1,#SP)
1010 NEXT SP
1020 NC=NC-1 :: GOTO 410
1030 B=0
1040 CALL SOUND(100,110,0,-7
,0):: CALL SPRITE(#12,40,16,
BY,240,BS,YS)
1050 RETURN
1060 CALL DELSPRITE(#12)
1070 CALL SOUND(-100,150,2,-
7,2):: SCORE=SCORE+SC
1080 CALL MOTION(#1,0,0)
1090 BIRD=BIRD-1
1100 IF BIRD=0 AND LEVEL=1 T
HEN 1370 ELSE IF BIRD=0 AND
LEVEL=2 THEN 1460 ELSE IF BI
RD=0 AND LEVEL>2 THEN 1490
1110 CALL PATTERN(#1,96)
1120 FOR DEL=1 TO 5 :: CALL
MOTION(#4,0,0):: CALL LOCATE
(#4,CHY,CHIX):: NEXT DEL
1130 CALL PATTERN(#1,100)
1140 FOR DEL=1 TO 80 :: NEXT
 DEL
1150 CALL PATTERN(#1,136)
1160 CALL MOTION(#1,20,0)
1170 CALL POSITION(#1,HY,HX)
1180 IF HY>160 THEN CALL DEL
SPRITE(#1)ELSE 1170
1190 GOTO 410
1200 CALL CLEAR
1210 CALL DELSPRITE(ALL)
1220 CALL CHARSET
1230 PRINT "GAME OVER--PLAY
AGAIN?(Y/N)"
1240 IF SCORE>HISCORE THEN H
ISCORE=SCORE
1250 PRINT "YOUR SCORE=";SCO
RE
1260 PRINT "HI-SCORE=";HISCO
RE
1270 CALL KEY(0,K,S):: IF S=
0 THEN 1270
1280 SCORE=0
1290 LEVEL=1
1300 IF K=121 OR K=89 THEN C
ALL CLEAR :: GOTO 110
1310 IF K=78 OR K=110 THEN 1
320 ELSE 1270
1320 END
1330 BY=136 :: BS=0 :: YS=-3
0
1340 RETURN
1350 BY=128 :: BS=-20 :: YS=
-20
1360 RETURN
1370 L$="SECOND"
1380 D$="HAS STARTED ITS DIV
E"
1390 CALL CLEAR
1400 CALL DELSPRITE(ALL)
1410 CALL CHARSET
1420 DISPLAY AT(10,1):"YOU H
AVE REACHED THE ";L$;"LEVEL
OF PLAY. NOW THE HAWK CAN BE
 SHOT ONLY AFTER IT   ";D$
1430 PRINT "PRESS ANY KEY TO
 CONTINUE   PRESS '0' TO QUI
T"
1440 CALL KEY(0,K,S):: IF S=
0 THEN 1440
1450 LEVEL=LEVEL+1 :: CALL C
LEAR :: IF K=81 OR K=113 THE
N END ELSE 120
1460 L$="THIRD"
1470 D$="HAS PICKED UP A CHI
CKEN"
1480 GOTO 1390
1490 FOR A=1 TO 10
1500 READ FAN(A)
1510 NEXT A
1520 DATA 323,626,828,929,10
00,555,888,444,222,323
1530 FOR A=1 TO 10
1540 CALL SOUND(100,FAN(A),2
)
1550 FOR DEL=1 TO 10 :: NEXT
 DEL
1560 NEXT A
1570 CALL CLEAR
1580 CALL CHARSET
1590 CALL DELSPRITE(ALL)
1600 PRINT "YOU WIN. PLAY AG
AIN?(Y/N)"
1610 PRINT "FINAL SCORE=";SC
ORE
1620 IF SCORE>HISCORE THEN H
ISCORE=SCORE
1630 PRINT "HI-SCORE=";HISCO
RE
1640 CALL KEY(0,K,S):: IF S=
0 THEN 1640
1650 LEVEL=1 :: RESTORE
1660 SCORE=0
1670 IF K=89 OR K=121 THEN C
ALL CLEAR :: GOTO 110
1680 END
1690 CALL CLEAR
1700 CALL SCREEN(2)
1710 FOR I=2 TO 8
1720 CALL COLOR(I,I*2,2)
1730 NEXT I
1740 PRINT TAB(8);"$$$$$$$$$
$$$$$$$"
1750 PRINT TAB(8);"$
      $"
1760 PRINT TAB(8);"$ CHICKEN
 HAWK $"
1770 PRINT TAB(8);"$
      $"
1780 PRINT TAB(8);"$     BY
      $"
1790 PRINT TAB(8);"$
      $"
1800 PRINT TAB(8);"$  RAY W.
SPEER $"
1810 PRINT TAB(8);"$
      $"
1820 PRINT TAB(8);"$$$$$$$$$
$$$$$$$"
1830 PRINT :: PRINT :: PRINT
1840 PRINT "  WRITTEN IN EXT
ENDED BASIC"
1850 PRINT
1860 PRINT "  DO YOU NEED IN
STRUCTIONS?
                    (Y/N)
"
1870 ACCEPT AT(24,16)VALIDAT
E("yYnN"):Y$
1880 IF Y$="Y" OR Y$="y" THE
N CALL CLEAR :: CALL CHARSET
 :: CALL SCREEN(4):: GOTO 19
30
1890 IF Y$="n" THEN CALL CLE
AR :: CALL CHARSET :: RETURN
1900 IF Y$="N" THEN PRINT "R
ELEASE ALPHA LOCK TO USE   J
OYSTICKS."
1910 PRINT "IF ALPHA LOCK IS
 RELEASED   THEN PRESS ANY K
EY TO BEGIN"
1920 CALL KEY(0,K,S):: IF S=
0 THEN 1920 ELSE CALL CLEAR
:: CALL CHARSET :: RETURN
1930 PRINT "ON LEVEL 1 YOU C
AN SHOOT AT THE HAWK AT ANY
TIME AND YOUREFFECTIVE 10 POINT
S FOR EACH  HAWK YOU SHOOT.
AFTER YOU"
1940 PRINT "HAVE DOWNED 10 H
AWKS WITHOUTRUNNING OUT OF C
HICKENS (YOUSTART WITH 7 CHI
CKENS) YOU  GO TO LEVEL 2"
1950 PRINT
1960 PRINT "ON LEVEL 2 THE G
UN WILL NOT FIRE UNTIL THE H
AWK HAS     STARTED ITS DIVE
. EACH HAWK SHOT ON LEVEL 2
IS WORTH 20 POINTS."
1970 PRINT
1980 PRINT "ON LEVEL 3 THE G
UN WILL NOT FIRE UNTIL THE H
AWK HAS     TAKEN A CHICKEN.
 A HAWK SHOTON THIS LEVEL IS
 WORTH 40   POINTS."
1990 PRINT
2000 PRINT "PRESS ANY KEY"
2010 CALL KEY(0,K,S):: IF S=
0 THEN 2010
2020 CALL CLEAR
2030 PRINT "ON ALL LEVELS TH
ERE WILL BE 15 POINTS DEDUCT
ED FROM THE SCORE WHEN A HAW
K STEALS A  CHICKEN WITHOUT
BEING SHOT."
2040 PRINT "ON LEVEL ONE YOU
 LOSE FIVE  POINTS IF YOU SH
OOT A HAWK  AFTER IT HAS TAK
EN A CHICKENON LEVEL TWO YOU
 GAIN FIVE  POINTS."
2050 PRINT
2060 PRINT "USE ARROW KEYS T
O MOVE GUN  UP AND DOWN AND
USE '0' TO  FIRE GUN OR USE
JOYSTICK    NUMBER ONE."
2070 PRINT
2080 PRINT "   PRESS ANY KEY
 TO BEGIN"
2090 CALL KEY(0,K,S):: IF S=
0 THEN 2090 ELSE RETURN
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SEA STALKER

(C) Infocom hints by Skybird

WELCOME to Sea Stalker! Let's hope you can not only find out who the Traitor to the Aquadome is, but that you'll be able to find the Underwater Terror!

You start off at your Private Lab & Test Tank. Little bits to help you here include:

Computestor: A machine for troubleshooting your inventions (and of course that's what you do for a living!). To use it just type >Ask Computestor about (and type in your item).

Security Scanner: if you're on the property & you're not wearing a special identification badge you're caught!

Electrical Panel: The lab receives its power thru this panel located in the corridor just East of your lab.

Circuit Breaker: even this adventurer knows what this is!

Videophone: This is your communications device. You can look at the person you are communicating with and will answer it by turning it on, then turning the knob to tune it in.

You'll meet Tip Randall (your closest pal), Commander Bly (a tough cookie but good looking), Mick Antrim (if you want to know anything about nuclear power, undersea navigation or communications he's the guy to ask), Marv Siegel (sonar gear specialty), Bill Greenup (scuba diver specialty), Walt "Doc" Horvak (scientist, marine biochemistry), Sharon Kemp (inventors assistant & you could think of her as your own sister in a way), Amy Lowell (Navy Frogman School, here as a summer job), and Dr. Jerome Thorpe (scientific genius, & an article about him in the Science World magazine). Watch it! One is a traitor !!

Your sub (Scimitar) will get you where you need to go! Here you need to know about:

Throttle: Yep, controls the speed of the Scimitar. Set Throttle to Slow and she travels one sea square each turn. Set Throttle to Medium and she will travel two sea squares per turn – on Fast she'll go three sea squares per turn, and of course Setting Throttle to Stop does just that.

Depth Control: directs the Scimitar's automatic guidance system to keep you a certain depth below the water's surface. Changes depth by 5 meters for each sea square that she moves thru.

> cont'd >

Joystick: turns the Scimitar to face any of 8 compass directions.
Auto Pilot: all operating controls go into automatic when this is set except Throttle.
Reactor–Catalyst Capsule (Reactor Lever): the secret to the Scimitar's power is its midget plasma–fusion reactor. For it to work a catalyst capsule must be put into the reactor & pushed with the reactor lever.
Engine Start Button: Can you guess?

Now, on your sub you have the following equipment and controls:
Brass Search light (lights on automatically when your sub descends beyond the depths of sunlight penetration); Sonarscope (works like radar and shows you solid objects within 2500 meters in any direction); Sonar Phone (underwater communications), Depth Finder (uses echo soundings to determine depth - orange light means within 10 meters, red light indicates 5 meters and you'd better do something quick!), Test Button (troubleshooting circuitry activated by pushing a test button), Engine Compartment (is located thru an access panel - watch it here!), Emergency Oxygen Gear (a canister for those who like to breathe! wear it around your neck and turn the valve), Extensor Claws (are remote controlled and you can: Take, Drop, Aim or Shoot).

Aquadome Equipment:
Emergency Survival Unit in two parts: Alarm activated when your sub runs low on oxygen and a needle that jabs you and wakes you up if you've passed out {ouch!}.
Aquatic Dart Gun - each dart has a tranquilizer and can be shot at a fish or large animal to make it drowsy.
The "49er" Prospecting Bazooka - useful for prospecting in undersea rock formations. Fires a hollow tube that bores into rock. Fired by a diver from a shoulder-held position.
Sea Cat - an interesting little craft that crawls along the sea bed like an underwater bulldozer. Has a main body that crawls and a rear power pod that propels it. Has a single rocket pod atop it that can be fired ahead of the craft.

DON'T FORGET to find or use: Reactor; Hydrojet; Tranquilizer; Dart gun; Bazooka; Syringe; Fine Grid; Electrolyte relay; Black Box; Diary; Tool; last but not least The Traitor and The Snark ! Good luck !

You feel the seat press harder against you. and the hydrojet gets louder. You're now travelling at a speed of 2 sea squares per turn . . .

Your score is 100 Points out of 100 in ??? turns . . . This score gives you the Rank of Famous Adventurer !